

Appln No. 10/670,950  
Amdt date September 14, 2006  
Reply to Office action of June 14, 2006

Listing / Amendments to the claims including status indicators :

Claims 1-17. (Canceled)

18. (Currently amended) A therapeutic dental delivery device for treating a condition in an oral cavity of a subject, comprising:

a liquid oral therapeutic dental composition;

an applicator for applying the composition to the oral cavity selected from the group consisting of a brush and a roller ball;

an activator [;and] selected from the group consisting of a click mechanism and a push button;

a cap for covering the applicator; the cap having an open end terminating at a position between the activator and the applicator; and

a reservoir located between the applicator and the activator and configured to store the composition,

wherein the activator is configured to dispense the composition from the reservoir to the applicator.

19. (Original) The device of claim 18, wherein the therapeutic dental composition comprises a moisture responsive gel carrier and a therapeutic agent dispersed in the moisture responsive gel carrier.

20. (Original) The device of claim 19, wherein the moisture responsive gel carrier comprises a moisture sensitive polymer complex and a water soluble salt.

21-24. (Canceled)

25. (Original) The device of claim 18, wherein the applicator is a brush and wherein the activator is a push button configured to dispense the composition to the brush applicator.

26. (Currently Amended) The device of claim 18, wherein the [applicator comprises a brush and the activator comprises a twist mechanism, wherein the twist mechanism dispenses the composition to the brush applicator] reservoir is confined within a removable cartridge.

27. (Currently Amended) The device of claim [18] 19, wherein [the applicator comprises a felt tip and the activator comprises a push button, wherein the push button dispenses the composition to the felt tip applicator] the reservoir is confined within a removable cartridge.

28. (Currently Amended) The device of claim 18, wherein the [the applicator comprises a felt tip and the activator comprises a twist mechanism, wherein the twist mechanism dispenses the composition to the felt tip applicator] device is free of metal.

29. (Currently Amended) The device of claim 20, wherein the [applicator comprises a brush and the activator comprises a push button, wherein the push button dispenses the composition to the brush applicator] device is made, at least in part, from a thermoplastic material.

30. (Currently Amended) The device of claim 20, wherein the [applicator comprises a brush and the activator comprises a twist mechanism, wherein the twist mechanism dispenses the composition to the brush applicator] reservoir is located in a body section of the device and wherein the cap is in a frictional engagement with the body.

31. (Currently Amended) The device of claim [20] 18, wherein the applicator [comprises a felt tip and the activator comprises a push button, wherein the push button dispenses the composition to the brush applicator] is a brush comprising a plurality of bristles, wherein the plurality of bristles are aligned generally parallel with an axis defined by a lengthwise direction of the device.

32. (Currently Amended) The device of claim [20] 18, wherein the applicator [comprises a felt tip and the activator comprises a twist mechanism, wherein the twist mechanism dispenses the composition to the felt tip applicator] is retractable.

33. (Original) The device of claim 20, wherein the moisture sensitive polymer complex comprises carboxypolymethylene and polyvinylpyrrolidone.

34. (Original) The device of claim 19, wherein the therapeutic agent comprises a peroxide.

35. (Original) The device of claim 19, wherein the therapeutic agent comprises hydrogen peroxide.

36. (Original) The device of claim 19, wherein the therapeutic agent comprises carbamide peroxide.

37. (Original) The device of claim 18, wherein the composition is present in an amount of from about 0.01 ml to 1.0 ml.

38. (Original) A therapeutic dental pen for treating a condition in an oral cavity of a subject, comprising:

a liquid oral therapeutic dental composition comprising a moisture responsive gel carrier and a therapeutic agent dispersed in the responsive gel carrier, wherein the gel carrier comprises a polymer complex including carboxypolymethylene and polyvinylpyrrolidone and a water soluble salt;

a brush-on applicator for applying the composition to the oral cavity;  
a push button; and  
a reservoir located between the applicator and the push button and configured to store the composition,  
wherein the push button is configured to dispense the composition from the reservoir to the applicator.

39. (Original) The pen of claim 38, wherein the therapeutic agent comprises a peroxide.

40. (Original) The pen of claim 38, wherein the therapeutic agent comprises hydrogen peroxide.

41. (Original) The pen of claim 38, wherein the therapeutic agent comprises carbamide peroxide.

42. (Currently Amended) A dental therapeutic kit comprising:  
a liquid oral therapeutic dental composition comprising a moisture responsive gel carrier comprising a functional polymer and a therapeutic agent, [a delivery device comprising] the dental composition having a starting viscosity;

a delivery device comprising:

an applicator for applying the composition to the oral cavity;  
an activator; and  
a reservoir located between the applicator and the activator and configured to store the composition, wherein the activator is configured to dispense the composition from the reservoir to the applicator;  
a set of instructions for applying the therapeutic dental composition; and

51. (New) The dental therapeutic kit of claim 42, wherein the applicator is selected from the group consisting of a brush, a felt tip, a roller ball, and a non-woven pad.

52. (New) The dental therapeutic kit of claim 42, wherein the activator is selected from the group consisting of a click mechanism, a twist and ratchet mechanism, and a push button.

53. (New) The dental therapeutic kit of claim 42, wherein the used viscosity is measured when the dental composition is reacted with moisture.

54. (New) The dental therapeutic kit of claim 42, wherein the functional polymer comprises at least a combination of two components.

55. (New) The dental therapeutic kit of claim 54, wherein at least one component of the functional polymer comprises a polymer capable of altering the viscosity of the dental composition in response to contact with moisture, changes in temperature, pH, ionic strength or combinations thereof.

56. (New) The dental therapeutic kit of claim 54, wherein at least one component of the functional polymer comprises vinylpyrrolidone polymers and copolymers.

57. (New) The dental therapeutic kit of claim 54, wherein at least one component of the functional polymer comprises crosslinked homopolymers of acrylic acid, crosslinked copolymers of acrylic acid, interpolymers of homopolymers or copolymers of acrylic acid, hydrolyzed or unhydrolyzed PVP/maleic acid anhydride copolymer, polycarboxylates, gellan gum, poly(methyl methacrylate-co-methacrylic acid), hydroxypropyl methylcellulose phthalate, or cellulose acetate phthalate.

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58. (New) The dental therapeutic kit of claim 54, wherein said combination of two components comprises a polymer complex comprising carboxypolymethylene and polyvinylpyrrolidone.